



In re Application of: Bobrowski, Paul
Serial No.: 10/674,587
Atty. Docket No.: PHMC0745-021
Amendment dated 9/27/2005
Reply to Office Action of June 6, 2005

Art Group: 1654
Examiner: Susan B. McCormick-Ewoldt

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently amended) A method of extracting [[the]] lipophilic components from plants of the family Euphorbaciae, comprising:

combining plant material of the genus Croton from the family Euphorbaciae with an organic solvent;

agitating the combination;

settling the combination into distinct phases to resolve a layer substantially comprised of hydrophilic constituents and an organic layer substantially comprised of the lipophilic constituents;

separating the organic layer from the layer substantially comprised of hydrophilic constituents; and

evaporating the organic solvent from the organic layer to resolve the lipophilic constituents.

2. (Currently Amended) The method of claim 1 wherein,

the plant material is latex~~either in viscous latex or at least partially dried latex from the family Euphorbaciae.~~

3. (Canceled) ~~The method of claim 1 wherein the plant is of the genus Croton.~~

4. (Original) The method of claim 1 wherein the organic solvent is selected from the group consisting of ethyl acetate, isopropanol and chloroform/Methanol mixture.

5. (Currently amended) The method of claim 1 further comprising,

~~adding a drying agent to the settled organic layer, prior to the step of evaporating the organic layer, to further precipitate any remaining hydrophilic constituents;~~ adding a drying agent to the settled organic layer prior to the step of evaporating the organic layer to further precipitate any remaining hydrophilic constituents; and filtering the organic layer to resolve the lipophilic constituents.

6. (Currently Amended) The method in claim 5 wherein the drying agent selected from the group consisting of [[.]] magnesium sulfate and sodium sulfate.

7. (Original) The method in claim 6 wherein the drying agent is magnesium sulfate and the amount added per liter of organic layer is between about five hundred milligrams (500 mg) to five grams (5 g) per liter.

8. (Original) The method in claim 5 wherein, after the step of filtering the organic layer, the organic layer at a concentration of one milligram per milliliter (1mg/mL) of 50% (v/v) ethanol/water has an absorbance of about 0.120 Abs Units in the wavelength range between about 390 nm and about 430 nm, relative to an absorbency of about 515 Abs Units within the same wavelength range.

9. (Original) The method of claim 5 wherein the proanthocyanidin components are reduced by at least about 90% relative to the parent latex.

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10. (Currently amended) The method of claim **1** wherein the step of evaporating the precipitate to resolve the hydrophilic constituents is selected from the group of ~~[[evaporating method]]~~ evaporating methods consisting of evaporation, spray drying, freeze drying, ~~[[or vacuum drying]]~~ and vacuum drying.

11. (Withdrawn) An extract of plant material from family Euphorbaciae at a concentration of 1mg/mL of 50% (v/v) ethanol/water having reduced relative UV absorbency between the range of 390 nm and 430 nm.

12. (Withdrawn) The extract in claim **11** wherein the relative UV absorbency between the range of 390 nm and 430 nm is reduced by a factor of about at least 4.3 relative to the absorbency of the unextracted plant material from family Euphorbaciae

13. (Withdrawn) The extract in claim **12** wherein the UV absorbency between the range of 390 nm and 430 nm is about 0.110 Abs Units relative to about 0.515 Abs Units for the unextracted plant material.

14. (Withdrawn) An extract of plant material from family Euphorbaciae at a concentration of about 1 mg/mL of carrier and having reduced UV absorbency in the range of 390nm to 430nm relative to the same concentration of unextracted plant material in the same carrier.

15. (Withdrawn) The extract in claim **14** wherein the carrier is aloe barbadensis.

16. (Withdrawn) The extract in claim 14 wherein the UV absorbency between the range of 390 nm and 430 nm is about 0.010 Abs Units relative to about 0.030 Abs Units for the unextracted plant material.

17. (Withdrawn) The extract in claim 11 comprising,

a pharmaceutical dosage unit composed of an extract of family Euphorbiae with reduced proanthocyanidin content and selective cytotoxicity to cancerous cells.

18. (Withdrawn) The extract in claim 11 comprising,

a pharmaceutical dosage unit composed of an extract of family Euphorbiae that inhibits gastrointestinal distress manifested as emesis.

19. (Withdrawn) The extract in claim 11 comprising,

a pharmaceutical dosage unit composed of an extract of family Euphorbiae that inhibits the activation of sensory afferent nerves.

20. (New) A method for making an extract from plants of the genus Croton of the family Euphorbaceae, comprising:

combining plant material of the genus Croton from the family Euphorbaceae with an organic solvent;

agitating the combination;

settling the combination into distinct phases to resolve a layer predominantly comprised of hydrophilic constituents and an organic layer predominantly comprised of lipophilic constituents;

separating the organic layer from the layer predominantly comprised of hydrophilic constituents; and

evaporating the organic solvent from the organic layer to resolve the lipophilic constituents.

21. (New) The method of claim **20** wherein,

the organic solvent is selected from the group consisting of ethyl acetate, isopropanol and chloroform/Methanol mixture.

22. (New) The method of claim **20** further comprising,

adding a drying agent to the settled organic layer prior to the step of evaporating the organic layer to further precipitate any remaining hydrophilic constituents; and filtering the organic layer to retain the lipophilic constituents.

23. (New) The method in claim **22** wherein the drying agent selected from the group consisting of magnesium sulfate and sodium sulfate.

24. (New) The method in claim **23** wherein,

the drying agent is magnesium sulfate and the amount added per liter of organic layer is between about five hundred milligrams (500 mg) to five grams (5 g) per liter.

25. (New) The method in claim 22 wherein,

after the step of filtering the organic layer, the organic layer at a concentration of one milligram per milliliter (1mg/mL) of 50% (v/v) ethanol/water has an absorbance of about 0.120 Abs Units in the wavelength range between about 390 nm and about 430 nm, relative to an absorbency of about 515 Abs Units within said wavelength range.

26. (New) The method of claim 22 wherein,

the proanthocyanidin components are reduced by at least about 90% relative to the parent latex.

27. (New) The method of claim 20 wherein,

the step of evaporating the precipitate to resolve the hydrophilic constituents is selected from the group of evaporating methods consisting of evaporation, spray drying, freeze drying, and vacuum drying.

28. (New) An extract from plants of the genus Croton of the family Euphorbiaceae made by the process of claim 22 wherein,

UV absorbency between a range of 390 nm and 430 nm is reduced by at least one-half relative to the absorbency for unextracted plant material within said range.

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29. (New) An extract as in claim **28** wherein,

the UV absorbency between a range of 390 nm and 430 nm is about 0.010 Abs Units relative to about 0.030 Abs Units for unextracted plant material.